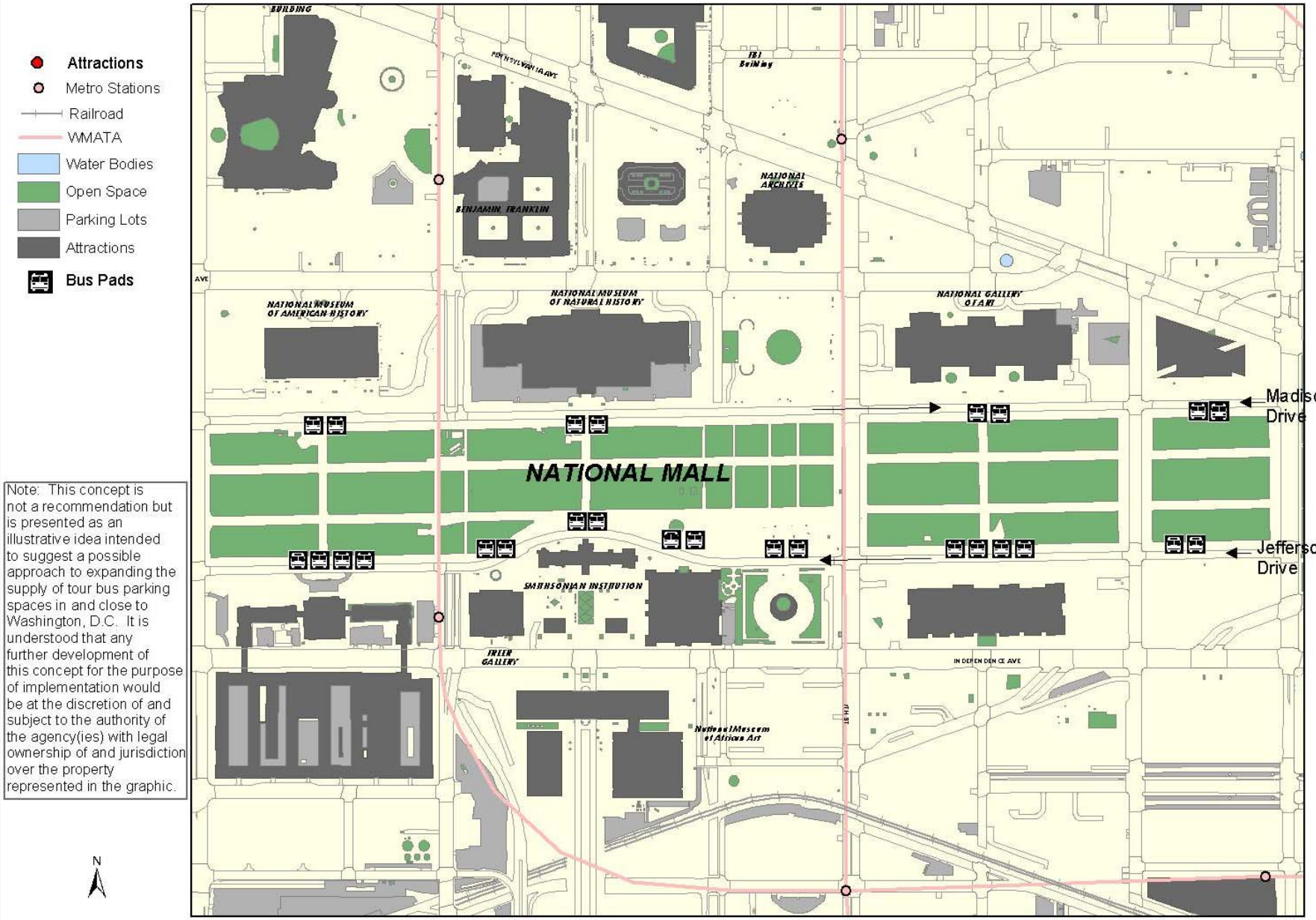
Exhibit 1

Boarding Space Concept: National Mall

- This option would provide for approximately 25 loading/unloading "bus pads" on Madison and Jefferson Drives.
- Reversal of existing one-way flow pattern on Madison and Jefferson Drives to permit right-sided boarding on Mall frontage (Note: continuation of two-way flow pattern on 3rd and 14th), resulting in less crowding and visual impact to the museum frontages.
- Madison and Jefferson are both low volume, very low speed (15 mph limit) frontage streets providing access to Smithsonian Museums (and USDA) as indicated in the figure below.
- Proposed site locations for bus pads are within already designated special permit parking zone (taxi/ disabled plate parking/loading zone)
- Each bus pad would be 60' in length, which permits independent entry and exit at slow speed (i.e., 5 mph) in a forward-flow system (i.e., no parallel parking with backing maneuvers are required)
- Identified bus pads would be appended to existing special permit zones that currently straddle existing curb cuts and marked crosswalks
- For improved enforcement and streetscape, special permit parking zones (including appended bus pads, curb cuts at Mall and Museum frontages, and marked crosswalk would be (re) constructed of different material, texture and color from street surface. Numbered bollards at the Mall frontage would serve to identify to driver and passenger each specific bus pad to assist in loading/unloading of tour passenger groups. Bollards would be of consistent design to those existing.
- The concept distributes bus pads for passenger loading/unloading along 1.2 miles in each direction at central location for Monumental Core, improving visual urban design effects, and avoiding concentrations of large vehicle parking and associated flow congestion induced by access/egress operations.
- The concept supports and is compatible with alternative concepts-of-operation (i.e., loading/unloading only; loading/unloading plus short-term parking; loading/unloading plus long-term parking)
- Mitigation for lost private vehicle (automobile) parking spaces (estimated to be 78 spaces) would include reduction of existing time limit from 3 hours to 2 hours (increase turnover/occupancy rate at curbside for remaining POV spaces), and converting some curbside sections along Mall frontage section to angled parking (increase in number of parking spaces in a given linear length). Angled parking would also have a self-enforcing traffic calming affect on maintaining slow speeds along both streets.

Figure 3-2. Concept: National Mall



3.1.2 Supporting Actions

The following measures have the potential to increase the effectiveness of the major actions identified above and in some cases may be essential to their success.

Parking Facility Pricing Strategies:

The tour bus parking rate at Union Station currently is a $20 flat fee with no "in-and-out" priveleges. Between the hours of 7pm and 7am, this rate is reduced to a $10 flat fee, again with no "in-and-out" privileges. Numerous stakeholders interviewed for this study remarked that this fee is too high. In other cities considered in this study, tour bus parking rates were in the range of $20-$25 per day, with multiple "ins and outs" permitted for the flat fee. Union Station is well situated to serve as a tour bus parking site for stops of 1-hour or longer in most of the Monumental Core and it is reasonable to conclude that the existing fee acts as a deterrent to optimum use of the facility by tour buses. Pricing policies at Union Station and any future facilities made available to tour buses will need to reflect cost considerations from the standpoint of the facility provider in addition to affordability for tour bus operators.

Facility pricing also bears consideration as a mechanism for encouraging efficient allocation of parking facility supply among short-term and longer-term users. Specifically, under a strategy of providing peripheral parking areas for long-term parking and centrally-located spaces, probably on-street, for short-term parking, pricing strategy can be used to encourage longer-term users to park in peripheral facilities, i.e., relatively high rates would be charged for short-term spaces, and lower fees, probably all-day flat fees for multiple ins-and-outs, would be in effect at peripheral parking lots. Pricing policy at short-term spaces could be implemented through metering of spaces or frequent and rigorous enforcement of posted time limits.

Advanced Scheduling:

Several visitor destinations in the District, including the Holocaust Museum and the National Cathedral, use advanced scheduling. Currently, the need to purchase individual tickets early in the day at several sites exacerbates the "bunching" of tour bus activity in peak morning commuting periods, increasing the need for loading/unloading space. This situation not only adds to localized parking and traffic problems, but also to congestion on the bridges and other gateways leading to downtown Washington. A coordinated reservation system could be designed to distribute both tour bus activity and visitation at each participating site more evenly throughout the day, reducing incidences of overcrowding at some times, and underutilization of facilities and resources at other times. From a logistical point of view, however, it will be difficult for all tourist sites to participate. Nevertheless, the use of an advanced scheduling system coordinated among some of the major attractions in the District may produce a significant improvement over the status quo.

Information Systems:

Information systems can consist of elements as simple as coordinated way-finding signage that directs tour buses to points of interest and designated parking areas, as well as interactive electronic communications providing real-time data on parking occupancy and availability at individual facilities. Electronic parking management technology is currently is a nascent stage of development. The only system implemented so far in the United States was an operational test in St. Paul, Minnesota that has since been terminated.

Research is currently under way in Europe to develop a *parking space optimization service* (PSOS) that could be accessed by the general public via cellular phone, personal digital assistant (PDA), or internet to obtain up-to-the-minute information on parking availability at multiple facilities. Adaptation of this type of system might be suitable for tour buses in the District if a system of multiple parking sites is implemented. Widespread improvements in traffic conditions could result, substantially reducing the mileage expended by tour buses searching for parking spaces.

The identification of existing parking spaces and tour bus routes on the District Department of Transportation website is an important first step in providing the information that tour bus operators need. Information systems can also play an important role in supporting city licensing and fee collection operations.

Routing:

A frequent complaint from District residents is the use of neighborhood streets by tour buses, producing unacceptable levels of noise and pollution from diesel fumes. The shortage of parking spaces frequently causes tour buses to venture onto neighborhood streets. Clear designation, communication, and enforcement of tour bus routes and restrictions can serve tour bus operators, particularly those who travel to the District infrequently and are unfamiliar with local roads. These simple actions will also benefit communities that seek to curtail the intrusion of tour buses into city neighborhoods.

In addition, further restrictions on tour bus circulation can be considered to reduce "cruising." Even if parking supplies are expanded, enforcement measures may be needed to deter drivers from driving around instead of parking, especially in the case of short "photo" stop visits to famous outdoor landmarks. Well-placed loading/unloading zones that allow short-term parking may also help to address this problem.

Permitting/Licensing and Enforcement:

Permitting and enforcement are essential to the effective implementation of tour bus management measures. Permitting provides a means not only of tracking and controlling tour bus operations, but also of collecting revenue. All of the other measures identified require funding, many of them in substantial amounts. While parking fees provide a mechanism for collecting needed revenues, maintaining affordable parking rates is necessary to ensure that they are used. Low levels of usage

at Union Station illustrate this point. The permitting process provides another mechanism for funding measures that support tour bus operations and management.

Local tour guides currently require licenses under a District of Columbia ordinance. The Washington Metropolitan Transportation Commission also issues mandatory Certificates of Authority to local operators. DC Code §47-2829 did require vehicles for hire with a seating capacity of over 12 passengers to obtain a license and pay a license tax of $150 per year or $10 per day. The tour bus industry sued the District to prevent enforcement of the licensing fee. Fee collection has been suspended pending resolution of the lawsuit. No certification is required for out of town tour buses or for *Tourmobile* vehicles operated under a concession to the National Park Service. Effective management of tour buses to alleviate existing problems is likely to require licensing or permitting of both local and out of District operators, in part to collect adequate revenues, but also to support compliance with regulations and restrictions and to address security concerns.

Driver Facilities/Shuttle for Drivers Between Parking Lots and Lodging:

Tour bus drivers currently have few opportunities for taking breaks for food or relief during the workday, as the absence of parking forces them to drive most of the time, sometimes continuously. Several of the potential parking facilities offer opportunities to provide needed services for bus drivers. At large peripheral parking sites, driver lounges could be provided with seating, food services (perhaps only machines), restrooms, and other amenities. Costs incurred could be covered by a combination of parking and permitting fees. Alternatively, at one or more central facilities in the downtown area, drivers could avail themselves of the food and amenities provided at local restaurants and other businesses. Shuttle services are likely to be necessary to transport drivers between peripheral lots and overnight lodging, although some of the sites are close to Metro stations. The expense for this service also could be borne by parking and permitting fees.

3.2 Evaluation Summary

Among the major potential actions, *Peripheral Parking* and *Centrally-Located Parking* are both rated "good" in terms of logistical feasibility for long-term parking, i.e. 1 hour or longer. Peripheral parking is not practical for short-term parking, such as would be needed to serve "photo stops." Table 3-1 notes that *Centrally-Located Parking*, in structured facilities, is of questionable feasibility for short-term stops, due to the time that would be required for entry to, exit from, and circulation within the garage, as previously discussed.

The primary advantage of the *Downtown Circulator*, if implemented as an alternative to the distribution of passengers to downtown sites by tour bus, is that the need for short-term tour bus parking would be eliminated. Logistical disadvantages include the need for a major change in current tour bus operations that may not be favorable to the tour bus industry and passengers who value the convenience of door-to-door service. Also, the need for expansion of boarding space at or near attractions in the District would not

be reduced substantially. As noted in Table 3-1, however, the *Downtown Circulator* option may be the most practical solution for serving Georgetown, which is not close to the major potential tour bus parking sites (evaluated in Table 3-2), other than Arlington Cemetery. Increased reliance on *walking* for distribution among destinations that are close to one another *would* reduce the need for curbside loading/unloading space, but can only supplement rather than substitute for other modes of distribution due to the distances separating major attractions visited by tour groups.

Among the supporting measures, simple information systems, coordinated pricing policies, the designation of tour bus routes, permitting, and strong enforcement are all highly feasible measures. Electronic information systems that could be used for real-time communication of occupancy status among multiple parking facilities are not yet practical, but should be available in the near-term following further technological development. Tour bus route designation can be updated in conjunction with the implementation of new parking facilities. Designated tour buses routes should avoid residential neighborhoods, environmentally sensitive areas, and circuitous circulation patterns that facilitate cruising. Generally, tour buses can be restricted to the major wide arterial roadways of the District. Enforcement is both necessary and feasible, but requires funding. Advanced scheduling is practical for a limited number of attractions.

Providing Peripheral or *Centrally Located* downtown parking would be positive for both tour bus operators and the downtown environment. In addition, increasing the supply of parking would have a positive impact on the availability of public parking if, as a result, tour buses occupy fewer spaces currently designated for public use. A significant difference between peripheral and centrally-located parking facilities is that the cost of providing peripheral parking is much lower, both because the land is less expensive and peripheral parking is more likely to be provided in surface lots rather than in structures.

Use of a Downtown Circulator to distribute visitors from tour buses parked at remote lots would require careful design and management to ensure that it remains convenient for tour bus patrons. Additionally, tour bus operators would be required to adjust tour itineraries and business practices to incorporate the use of a circulator system into their tour packages. A more workable solution would be for tour bus patrons to board a circulator with their tour guide once arriving in the Monumental Core, and to use the circulator to move among several attractions before reboarding their tour bus downtown. Increased reliance on *walking* may raise similar issues for tour bus passengers and operators, although to a lesser degree, because walking would not substitute for current tour bus distribution to the same degree. The environmental impacts of walking would be strongly positive. Increased use of walking is the only option that could substantially reduce tour bus boarding space requirements.

The impacts of *Expanding Curbside Loading/Unloading Space* would be positive on tour bus operators and tour groups, as well as the environment, because the associated reduction in traffic congestion would result in reduced air pollution. Potential adverse impacts, including loss of on-street parking displaced by new tour bus parking spaces and visual impacts at attractions (i.e. the “wall of buses” effect) would have to be

considered carefully during planning. While buses pulling into traffic from parking spaces will have some negative effects on traffic flow, the net impact of reducing bus queuing and double parking should be strongly positive.

3.3 Potential Parking Sites

As discussed previously in this chapter, expanding the existing modest supply of tour bus parking spaces in the District will be central to solving the problems associated with tour bus operations. Interviews conducted with several tour bus operators and industry representatives indicated that in the peak spring season, a total of about 1,000 tour buses transport visitors into the District on a daily basis. Assuming a distribution of short- and longer-term tour bus stops, and allocating time for travel between sites, as well as loadingand unloading, peak parking demand is estimated to be 650-700 spaces. Potential parking sites that have been identified to meet this need are identified below and illustrative concept-designs are provided for potential centrally-located facilities.

3.3.1 Peripheral Parking Sites:

1. Area south of South Capitol Street Bridge between I-295 and Anacostia River
2. Barney Circle (surface facility at lower level
3. Arlington Cemetery *(see Exhibit 2)*
4. Buzzard Point, Half and R Streets, SW
5. U-Haul lot on South Capitol Street near north bridge abutment
6. Whitehurst Freeway/K Street (surface area under highway)
7. E Street ramp area under Potomac Freeway (east of Kennedy Center)
8. Harry Thomas Way/Eckington NE (northeast of New York/Florida Avenues intersection)
9. East Potomac Park
10. RFK Stadium
11. Western Division Metrobus Garage, Wisconsin Avenue, NW and Jenifer Street NW (to serve National Cathedral)
12. Carter Baron Amphitheatre (to serve National Cathedral)

3.3.2 Central Parking Garage Sites:

13. New Jersey and I Streets, SE
14. I-395 between H and K Streets NW, Air Rights Parking Deck/Garage
15. Massachusetts Avenue and 9th Street NW
16. Old Convention Center (surface lot short-term; part of mixed-use development long-term)
17. Union Station (air rights expansion over tracks) *(see Exhibit 3)*
18. E Ellipse (underground)
19. Banneker Overlook (surface facility or Intermodal Transit Center development) *(see Exhibit 4)*
20. Waterfront Park-Georgetown (underground)

Major characteristics and issues associated with each of these sites are summarized in Table 3-2. The travel time zones referenced in the Table are shown in Figure 3-3. Each

of the zones, numbered 1-11, defines an area that includes attractions located close together and drawing relatively large numbers of tour buses. Tour bus travel times have been estimated between each of the zones and the potential tour bus parking sites included in Table 3-2. (These estimates are based on measurements of actual travel times for a sample of the sites and estimated average speeds of approximately 15 mph for most of the other sites.) For example, the table shows that travel time between the parking site at New Jersey & I Streets and Zone 1, which includes the Lincoln Memorial, is 15-20 minutes. Routings between each of the parking sites and the major roadways providing access to the attractions they are intended to serve (the eastern, central, or western section of the Monumental Core, Arlington Cemetery, Georgetown, or the National Cathedral, as applicable) are shown in Figure 3-4.

A large number of parking spaces could be provided at several of the peripheral lot sites identified, including New Jersey & I Streets, So. Capitol Street Bridge/Anacostia, RFK Stadium, East Potomac Park/Hains Point, Arlington Cemetery, and Buzzards Point. Smaller numbers of spaces could possibly be provided at some of the other locations, such as Barney Circle and the U-Haul Lot on So. Capitol Street. Most of the sites are in the eastern and southern sections of the District, because the Northwest is developed at high densities. While several different sites provide acceptable (< 15 minutes) travel times to the Monumental Core for longer-term parking, only Arlington Cemetery and East Potomac Park meet this travel time threshold for Georgetown.

With the exception of Barney Circle, the above sites are located in areas that are not residential. The most significant land use concerns pertain to East Potomac Park/Hains Point, which is parkland under the jurisdiction of the National Park Service, and Arlington Cemetery, where any disturbance of the tranquility and reverent atmosphere would be highly sensitive, even though impacts would be confined to an existing parking facility. Groundwater pollution has been mentioned as a potentially serious problem in connection with the So. Capitol Bridge/Anacostia site and this would require more detailed study. In several cases, potential traffic operational issues are identified in the Table. While these would require further analysis prior to implementation, there do not appear any “fatal flaws” related to traffic that should eliminate any of the sites from further consideration. Generally, land availability and development cost would be the critical deciding factors in selecting from among these sites. The Table notes that necessary reconstruction of the RFK access road and parking area to accommodate tour buses would be expensive. Development of a few relatively large sites is advisable, both to limit costs and to increase the likelihood that space will be available at any individual site that a tour bus driver may first select.

Two potential sites are identified in Table 3-2 that could provide remote parking to serve the National Cathedral: the Western Division Metrobus Garage at Wisconsin and Jenifer Streets and the Carter Baron Amphitheatre. The Cathedral currently provides 17 tour bus parking spaces in two curbside lanes on Wisconsin Avenue. Buses park at these spaces for the entire duration of a group tour. Providing remote spaces would allow the Cathedral either to shift parking off-site or to increase visitation.

A number of sites are identified in Table 3-2 for centrally-located parking facilities. Union Station, which is included in the Table, has an existing parking garage that

accommodates tour buses. Several sites are identified that would be closer than Union Station to Ford's Theatre (Zone 7), where tour bus operational problems rank among the worst in the city. Travel times between Zone 7 and Union Station are only 5-10 minutes, however, so the benefits of constructing additional downtown garages, in terms of improved access, are likely to be small. The former convention center site presents some substantial advantages, however, in that it may offer the opportunity to develop a centrally-located surface lot, on a temporary basis—perhaps extending a few years—that may be attractive to tour bus operators as a short-term parking facility.

Another option that may merit additional consideration is development of parking in a structure, perhaps underground, on the Georgetown Waterfront. The most likely scenario would be to incorporate the parking garage below the planned park. A small surface parking area (illustrated in Exhibit 4) or much larger parking garage could be developed at Banneker Overlook. The garage concept might have the most value as an intermodal transfer facility in conjunction with a *Downtown Circulator* strategy, although Union Station may be an equally good location for this facility.